SUSTAINABILITY AND DESIGN

Design for social innovation: Emerging principles and approaches

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Abstract

Contemporary design professionals have been struggling with the challenges posed by addressing the core concepts of sustainable development in earnest for over thirty years (Fletcher & Giggin, 2001; Fuad-Luke, 2009). The sustainable development agendas are providing an opportunity to ask fundamental questions of design itself. In recent years design professionals have been pushing design beyond being just engaged with consumer culture and exploring new forms of practice. This is particularly evident when design is used to tackle social issues to create innovative solutions (Margolin & Margolin, 2002; Fuad-Luke, 2009). There is growing consensus that design can be a mode of innovation that provides a set of skills, tools and methods that guide people to new socially innovative solutions or improvement of existing ones (Brooks, 2011; Emilson, Seravalli & Hillgren, 2011; Social Innovation Exchange, 2011a). Social innovation is "innovation that is explicitly for the social and public good. It is innovation inspired by the desire to meet social needs which can be neglected by traditional forms of private market provision and which have often been poorly served or unresolved by services organised by the state" (Murray, Caulier-Grice & Mulgan, 2010:10). After a very brief review of sustainable development and how design professionals have addressed the concepts, this paper will explore 'design for social innovation', its emerging principles and approaches and the opportunities and challenges for design professionals engaging in it.

Download PDF version: English (311 KB)

Citation: Anne Chick (2012). Design for social innovation: Emerging principles and approaches, *Iridescent: Icograda Journal of Design Research*, 2(1).

Introduction

There is a new breed of determined, creative idealists who wish to apply both design craft and design thinking as levers for political and societal change. New perspectives, ideas and technologies are being harnessed to push design beyond being engaged just with consumer culture. Design professionals, organizations and others are initiating projects that are concerned with the sustainable development agendas, both inside and outside the market economy (Chick & Micklethwaite, 2011). This is a journey of professional exploration for the designers and design researchers involved in such projects, who are not being bound by what has defined the profession in the past. These design professionals believe that the way they work can contribute to addressing particular pressing social and environmental issues (Kimball, 2011; Fuad-Luke, A. 2009). This has led to designers working in a gamut of new social and political contexts very different from the majority of their peers, and does not draw upon their higher education experiences. They are exploring and creating new forms of practice as well as identifying worthwhile projects, which in turn leads to the reinvention of design culture. This paper explores 'design for social innovation', its emerging principles and approaches and the opportunities and challenges for design professionals engaging in it.

Design strategies, methodologies, tools and language are evolving, due to how design professionals and others are addressing an increasing range of social, cultural and environmental challenges. The ideas about 'what design is' are thus changing, as design is adapting to participate in these sustainable development arenas. Fuad-Luke (2009) continues to ask through his writing and practice: Could the creation of well being, and not goods or services, be a new purpose for design? This questioning is leading to new radical approaches wherein design professionals are demonstrating new values through design action (Pilloton, 2009; Fuad-Luke, 2009; Chick & Micklethwaite, 2011). The application of "design thinking" (Brown, 2009) and other recent design methodologies, such as "design for social innovation", are creating socially innovative solutions which in turn is bringing new social significance to design and designers (Tromp, Hekkert & Verbeek, 2011).

Social sustainability in brief

Walker discusses 'sustainability' (in the context of sustainable development) as the dominant "myth" in contemporary industrialized society and the fact that the term and concept has such contemporary cultural value shows the importance, now collectively recognised, of the issues and ideas it represents. Walker's view is that the idea of sustainable development is our shared cultural way of reinventing values and principles that have been increasingly forgotten in the rapid growth of industrialized modern society. Confusion, as to what sustainable development is, unfortunately continues to hamper attempts to respond to it as an agenda, in design as much as in any other activity, sector or discipline (Fairs, 2009:6). Sustainability is made up of a complex array of sometimes competing considerations, therefore, requires a holistic view of the world and our place within it. The term 'sustainability' is asked to do a huge amount of work and those using the term need to be careful with how it is used.

To progress towards a more sustainable world, design professionals need to learn their way out of unsustainable practices and explore new design arenas. A practical starting point is to break down sustainable development into broad concepts and principles. All initiatives aiming to address sustainable development should consider it's four dimensions – environment, society, culture and economy (United Nations General Assembly, 2005; UNESCO, 2001). Since the local context has a great influence on these dimensions, sustainable development takes many forms around the world. The ideals and principles behind sustainability include broad concepts such as:

- Biodiversity
- Climate Change
- Cultural diversity
- Indigenous knowledge
- Disaster risk reduction
- Poverty reduction
- Gender equality
- Health promotion
- Sustainable lifestyles
- Peace and human security
- Access and conservation of water for human use
- Sustainable urbanisation (UNESCO, 2011)

Due to a focus on exploring the arena of design for social innovation, this paper has prioritised the social mandate of sustainable development. Until recently the bio-physical environmental issues of design have dominated the 'sustainable design' (sometimes referred to as 'design for sustainability') discourse, often resulting in the human dimension being neglected (Chick & Micklethwaite, 2011; Fuad-Luke, 2009). There seems to be a renewed interest in the concept of 'social sustainability' and aspects thereof. Vallance et al (2011) seek to clarify what might be meant by the term social sustainability because the conceptual field is confused, resulting in uncertainty about the term's many meanings and applications.

Development sustainability	Addressing basic needs, the creation of social capital, justice and so on
Bridge sustainability	Concerning changes in behaviour so as to achieve bio-physical environmental goals
Maintenance sustainability	Referring to the preservation (or what can be sustained) of socio-cultural characteristics in the face of change, and the ways in which people actively embrace or resist those changes

Figure 1: Three sub-categories of social sustainability and the different w ays they contributes to sustainable development as identified by Vallance et al, (2011: 342).

Sustainable development is a social imperative (not just an environmental problem) that demands well-informed, theoretically robust, yet pragmatic, social solutions. These three sub-categories are useful frameworks for those engaged in social innovation initiatives who are aiming for a better understanding of how to achieve a smoother and more equitable transition from less to more sustainable futures.

Design for sustainable futures

The design community is becoming increasingly conscious of how design can address sustainable development agendas, if publications and web traffic on the subject are true indicators. The words 'design' and 'sustainability' are not fixed in their meaning and neither is the emerging language and narrative of 'design for a sustainable future' (Margolin, 1998; Thorpe, 2007). It has been acknowledged that design can be critical in addressing the various sustainable development concepts because it can have significant (both positive and negative) economic, environmental, social and cultural ripple effects.

The dominant conversation on how design can address the sustainable development agendas initially grew out of the environmental life-cycle thinking of 'ecodesign' (Fletcher & Giggin, 2001; Thorpe, 2010:4; Chick & Micklethwaite, 2011:102-111). To this has now been added the aim of sustainable consumption where design is considering the sociological and psychological aspects of the consumption of products (Chapman, 2005; Thorpe, 2010). For example, designing products that encourage consumers to build a strong relationship and result in retention of the product for a longer period of time (Van Hinte & Bonekamp, 1997). A further leap is the broadening of discourses from "product-based wellbeing solutions" approaches to attending to the "quality of our contexts for living" (Thorpe, 2010:11). Manzini (2002:5) neatly characterizes this approach as a move from "products to results".

Design for social innovation common elements: Design thinking / participatory design

In the mid-2000s, the canvas for design professionals broadened even further, with a number of well know designers including Mau and Brown advocating that "design thinking" could be used to talk about "massive change", or breakthrough thinking in complex problem domains, such as the social mandate of sustainability (Berger, 2010; Brown 2009). Designers would be challenged to go beyond consumer culture and economic markets and become engaged in socially innovative design. Academics and practitioners have highlighted that design thinking has added understanding, precision and breadth to the design process by emphasizing the importance of:

- collecting good data in advance;
- a clear design brief and how to construct it;
- rapid prototyping;
- it to (social) innovation; and
- working in new, more interdisciplinary ways which emphasize problem solving and systems change through collaborative action (Westley et al 2012:06; Szebeko & Tan, 2010).

Design thinking contested the omnipotent designer and a focus on products as the solution. It advocates design as a "collaborative effort where the design process is spread among diverse participating stakeholders and competences" (Björgvinsson et al, 2012:101). This process should not be based merely on consultation with users/citizens and stakeholders, but on their active participation. This is the "participatory design" process and is a design for social innovation priority principle (Burn et al, 2006; Szebeko & Tan, 2010; DESIS, 2011). The rationale is that this approach ensures the final solution meets actual needs and requirements and is usable by its intended audience. "Designing networks" are a response to the requirement for new thinking to address perplexing problems and the need to involve a range of actors and stakeholders working together in ways that encourage open innovative solutions (Manzini, 2007; Murray et al, 2010; MacDonald, 2011). It is important that design professionals who wish to engage in this arena, acknowledge that everyone who devises courses of action aimed at changing existing situations into preferred ones is designing (Simon, 1996). Advocates generally share the view that every participant is an expert in what they do, has valuable insights the designing network can learn from, and has a voice that needs to be heard.

Spending time with users/citizens in their own environments, rather than working on a project abstractly in another space, is another important part of the research and design process (Manzini, 2006; Thackera, 2007; Pilloton, 2009). The assumption is that the expertise does not reside solely with the design professionals, but is also to be found in those whose interests are affected by the problem and its proposed solution. The third important element is the envisioning of ideas with the stakeholders – that especially those of future users are explored early in the design process in a human-centered, empathic, and optimistic, hands-on way. This involves engaging hands-on design devices, like sketching, mock-ups and prototypes and design games, and helping to uphold a family similarity with the users' everyday practice and supported creative, skillful participation and performance in the design process (Björgvinsson et al, 2012:106).

Those engaged or wanting to be involved in design for social innovation need to be aware of the evolving language, models of investigation, ongoing research, and core discourses in the field. There are some common elements that appear in a credible design for social innovation model. Westley et al (2012:09) and Chick & Micklethwaite (2011) identified the following:

1. Broad-based research
2. Co-creating of the solution
3. Conducive physical space(s) that aid creativity and reassures participants
4. Clear process design and facilitation

5. Engaging hands-on design devices (sketching, mock-ups, prototyping and design games)
6. Multi-disciplinary support team
7. Tools that aid reflection on the nature of the work and its possible and actual impacts
8. Continual professional development of designers and other team members

Approaches to social innovation are in line with the ideas of design thinking, which seem fundamentally to have similar common elements to participatory design. Bjögvinsson, Ehn and Hillgren (2012:101) observed that design thinking "sounds like good old Participatory Design", although they admit Brown and others have "better articulated" and created a "more appealing rhetoric".

Social innovation

This type of design engagement which is focused upon achieving social and public well-being (not necessarily overtly under the social sustainability agenda) has started to be framed within the context of social innovation especially in Europe (Manzini, 2009; Emilson et al, 2011). The National Endowment for Science, Technology and the Arts (NESTA), in the United Kingdom, defines social innovation as,

> …Innovation that is explicitly for the social and public good. It is innovation inspired by the desire to meet social needs which can be neglected by traditional forms of private market provision and which have often been poorly served or unresolved by services organised by the state. Social innovation can take place inside or outside of public services. It can be developed by the public, private or third sectors, or users and communities – but equally, some innovation developed by these sectors does not qualify as social innovation because it does not directly address major social challenges (Murray et al, 2010:10).

The resulting social innovations can be new products and services just like any innovation (Murray et al, 2010), but they can also be a principle, an idea, a social movement, an intervention, or some combination of these possibilities (Bjögvinsson et al, 2012; Design Council, 2010).

These innovations are deemed not only as good for society, but also enhance society's capacity to act. The process of social interactions between individuals addressing certain social needs and developing outcomes is participative, involves a number of actors and stakeholders who have a vested interest in solving the problem, and empowers the beneficiaries. The process is in itself an outcome as it produces 'social capital' [1]. Given this process, social innovations can be more specifically classified.

Broad social innovation categories

1	Generally grassroots social innovation that responds to pressing social demands otherwise not addressed by the market and which is directed towards vulnerable groups in society.
2	Broader level that addresses societal challenges in which the boundary between 'social' and 'economic' is blurred and which is directed towards society as a whole, i.e. the Red Cross.
3	Systemic type that relates to fundamental changes in attitudes and values, strategies and policies, organizational structures and processes, delivery systems and services, i.e. an initiative relating to action to make citizens more aware of climate change. These social innovations, which are often initiated by institutions, play a part in reshaping society as a more participative arena where people are empowered and learning is centra

Figure 2: Three broad social innovation categories identified by the Bureau of European Policy Advisers (European Commission, 2010:11).

Social innovation is gaining attention and support from governmental institutions and the third sector (voluntary and not-for-profit) as a tool to tackle social problems. It is now discussed at an international level and is a key priority in the European Union (EU) as Member States engage in a building "a smart, sustainable and inclusive Europe" where social issues are being brought to the fore (European Commission, 2010:07). The EU is interested in successfully implemented social innovations, as this can set a good example for other Member States to follow, especially if the initiative reduces public spending as well as effectively addresses social needs (European Commission, 2010:08). It is also a major component of aid programmes targeted at developing countries.

Introducing design for social innovation

Design (often referred to as 'design thinking') is being recognized as a valid process for undertaking a social innovation project by funding and policy organizations, and others; for example, the Rockefeller Foundation and the UK's Design Council have all promoted and funded research and initiatives in this field (Murray et al, 2010; IDEO, 2008; Design Council, 2010). There is growing consensus that design is a mode of innovation that provides a set of skills, tools and methods that can guide people to new social innovative solutions or improve existing ones (Brooks, 2011; Emilson et al, 2011; Social Innovation Exchange,

2011a, 2011b; Winterhouse Institute, 2011). There is a growing momentum also from design professionals including design schools to engage with this agenda and understand how to enhance the processes and practices for designing for social and public good (Emilson et al, 2011; Morelli, 2007). This emerging field is increasingly being referred to as 'design for social innovation' (DESIS, 2011; Social Innovation Exchange, 2011b).

The design for social innovation investigations and the resulting evolving language, definitions, methodologies and practices have been driven over the past decade by a number of respected knowledge and facilitation hubs across Europe and North America (Emilson et al, 2011:25; Westley et al, 2012). For example, Professor Ezio Manzini, the Italian designer and academic, and the DESIS network [2] he formed, have been key drivers of such design practices (DESIS, 2011). In the DESIS network, ideas from a variety of actors directly involved in the problem to be addressed is central to the process. This has led to end users, grass roots designers, technicians and entrepreneurs, local institutions, and civil society organizations, being centrally involved in DESIS projects. An opening concept for Manzini and his colleagues is "collaborative services". The role of the designer is initially to support the development of new concepts and later to make them attainable so they can result in the development of social enterprises (Jégou & Manzini, 2008). In addition, a small but growing number of design agencies and design-led social enterprises have been forming to practice design for social innovation, such as UsCreate, ThinkPublic, Participle in the United Kingdom, and Project H in America (Design Council, 2010; Thackera, 2007; Pilloton, 2009).

Design for social innovation fits with the Local Agenda 21 approach to achieving sustainable development. Agenda 21 is a non-binding, voluntarily implemented action plan of the United Nations with regards to sustainable development. Local Agenda 21 is a local-government-led, community-wide, and participatory effort. Key elements are complete community participation, assessment of current conditions, target setting for achieving specific goals, monitoring and reporting. The assumption is that, without shared visions, only short-term solutions are possible and these are unlikely to be the most sustainable solutions. Shared visions reached through collaborative processes are most likely to deliver sustainable solutions of long-term value.

Developing design capabilities: The challenges of metadesign

There is confusion amongst design professionals about this field particularly with regards to the processes and procedures of researching and designing (Rules, 2008; Chick & Micklethwaite, 2011:114-115/166-167). How can they operate in these designing networks (Manzini, 2007) that often contain various actors and stakeholders such as individual people (users/citizens), enterprises, non-profit organizations, local and global institutions? Furthermore, the terminology of design for social innovation is evolving and there are numerous terms appearing which can only add to this confusion.

The design for social innovation strategic frameworks and "metadesigns" (Wood, 2008) are not perfectly formed. Metadesigns are structured creative processes in which new forms of collaborative design take place. This process is enabled by a set of tools, methodologies and "ways of doing" (Manzini, 2007). This has led to a particular focus on the importance of developing design capabilities - design thinking and design tools (Social Innovation Exchange, 2011b; Emilson et al, 2011). These design capabilities have been defined as explicit (when they are performed by professional designers) and implicit (when they are expressed by non-professional designers) (Social Innovation Exchange, 2011b).

The ultimate goal of a design for social innovation metadesign, would be a synergistic process enabling the designing network to reach a gradually more shared, comprehensive and focused understanding and consensus, which would result in innovative ideas leading to a collectively acknowledged final solution (Morelli, 2011; MacDonald, 2011; Emilson et al, 2011). MacDonald (2011:5) describes the process as a "participative co-research and co-design approach" that should be an "ongoing iterative process throughout the project". The most successful projects seem to be those that start prototyping early and the prototype redesigns are a co-designing process (Morelli, 2011; MacDonald, 2011; Emilson, 2011). Inappropriate concepts are therefore rejected earlier, improving success rates sooner (Burns et al, 2006:21).

The techniques used in the designing networks are generally social and qualitative in nature (Hewer, Guldbrandsen & Crawley, 2011; Burn et al, 2006; Morelli, 2011). The approach is a brief of flexible engagement and human-centered delivery, often using the participatory methodology of co-researching and co-designing, which are dovetailed into a number of social research methods and techniques, such as ethnography (Hewer et al, 2011; Szebeko & Tan, 2010; Emilson et al, 2011:25; MacDonald; 2011). These approaches often have their origins in a number of contemporary design principles, strategies, and methodologies, such as design thinking (Brown, 2009), inclusive design (Coleman, Clarkson, Dong & Cassim, 2007), transformation design (Burn et al, 2006) and service design (Sangiorgi, 2010). These methodologies in turn have been influenced by open innovation [3] thinking (Murray et al, 2011:38).

In all these approaches the role of the design professionals is generally to involve the different stakeholders in the process and design with them rather than for them (Leadbeater, 2009). This means exploring "social issues, relationships and creating engagement in communities", as well as "working across professional and sector boundaries to create new alliances and collaborations" (Emilson,

2011). This democratization of design is bringing a gradual shift in the way design is discussed and the way it is being carried out. This means users/citizens are moving from the passive consumption of design, to a more active participation in the process and maintenance of the outcome (Manzini, 2006; Thackera, 2007; Design Council; 2010).

New roles are also emerging for design professionals as their function is increasingly changing from that of generators to facilitators of ideas (Hewer et al, 2011; Emilson, et al, 2011).

The challenges for designers and the design community in engaging in design for social innovation are unfolding, and it is increasingly acknowledged that this design is no longer constrained to the democratization of co-researching and co-designing within a project. Now, the designer is designing beyond the specific project and towards the future stakeholders continuing to modify and redesign the solution. The majority of the above methodologies are seen as a way to meet the challenges of anticipating or envisioning a solution, as it takes place in people's everyday lives. This approach is about addressing the challenge of design as an ongoing process and developing a potential design and the infrastructure so it can takes place in use after a specific project. This means the strategies of addressing a problem need to be open for appropriation in use, after a specific project is finished, and regard this appropriation of the present (evolving) solution as a potential, specific kind of design. This has begun to result in participative processes and practices being adapted to the challenge of "infrastructuring" rather than "projecting" (Björgvinsson et al, 2012). This means the project's capacities should be transferred amongst the actors and stakeholders by leaving behind the tools, skills and organizational capacity for ongoing change (Burns et al, 2006:21).

Words of caution

Design's 'project' focus can provide a way into complex social issues and provide the right scale. Design processes and universal visual language can provide the basis for conversations and tangible new visions and solutions. Design can be successfully used to address complex social problems, but the design community needs to learn to adapt to this new landscape. There is still a lot to be explored, tested and developed with regards to bringing rigor to this field and the design professional's ideal roles and responsibilities (Mulgan, 2009; McCullagh, 2010; Schulman, 2010; Brooks, 2011). There is concern that attempts to address neglected social needs through design without deep enough immersion or long enough follow-through, could result in the project becoming an imposition, or at worst, be perceived as imperialist (Tonkinwise, 2010; James, 2010). The advice is to only work on projects 'at home' and build long-term relationships with key stakeholders and actors (Emilson et al, 2011:26; Björgvinsson et al, 2012). In this perspective, design becomes about the everyday practices in particular sites and locations; it becomes about a practice committed to the work of envisioning emerging design topographies through which social and material transformations take place, in a setting, encouraged and shaped by the opening up of questions and possibilities.

Design professionals working in the design for social innovation field are generally learning new strategies, tools and methods through 'on the ground' projects and action-based research situations. This is the only approach they have to support the development of robust proposals and processes and learning their implementation in real contexts (Hewer et al, 2011:9; Chick & Micklethwaite, 2011:166-167). It is important that designers develop credible tools and knowledge to reflect the nature of their work and its actual impact in the arena of design for social innovation. Kimball (2011) stresses, however, that the design profession is still developing its clear disciplinary boundaries, strong institutions or professional codes of ethics.

Academics and other professionals experienced in implementing design for social innovation projects are increasingly highlighting to those working or aiming to work in this arena, a growing number of issues they need to know and be mindful of. For example, design professionals should focus their attention as much on how they and others construct and interpret social problems and their contexts, as they are focusing on solving them (Kimball, 2011; Björgvinsson et al, 2012). This should also be followed through with an objective critical perspective on the use of design thinking (participatory design) and whether it can add and complement important existing resources. Designers, and the processes they use (such as design thinking), are about the pursuit of a solution generally based on responding to stories of personal troubles. This approach might not be right for messy, intractable social issues. Kimball (2011) goes further and suggests "concepts such as reflexivity can help designers become aware of how their own commitments shape how they understand what is going on and what they think they can change".

Conclusion

Design is going through a period of intellectual expansion, and adapting to participate in new arenas beyond its usual professional territories. This is resulting in design professionals themselves evolving and developing greater awareness in relation to what they do, what they can do and how they can do it. The challenge for designers engaged in design for social innovation and sustainability is that the landscape is still at a "fluid phase", in which Morelli (2011:109) concludes, "…neither the strategic frameworks nor the way to address problems and opportunities proposed within those frameworks are perfectly formed". Nevertheless, design can play an important role in triggering, supporting and scaling up social innovations. It is increasingly recognized that there are new

and scaling up social innovations. It is increasingly recognized that there are new forms of design practice under development outside of consumer culture and one of these is in the design for social innovation field. These new practices will require design to collaborate more closely with other disciplines and "social heroes" (Brooks, 2011) involved in and creating social innovations (Mulgan, 2009). There is also an identified need to dovetail policy thinking, social research techniques and methodologies, and business expertise (when appropriate), along with an understanding of design for social innovation processes. This will enable complex social issues to be identified, and then, meaningful practical solutions developed (Mulgan, 2009; Emilson et al, 2011). All these stakeholders express the same needs regarding the 'scaling up' of social innovation, networking them and promoting public/private partnerships, developing common methodologies for measuring impact and social return, and providing funding by creating capital markets and appropriate regulations to attract investment.

Footnotes

[1] "The commonalities of most definitions of 'social capital' are that they focus on social relations that have productive benefits. The variety of definitions identified in the literature stem from the highly context-specific nature of social capital and the complexity of its conceptualization and operationalization" (Claridge, 2012).

[2] The 'Design for Social Innovation and Sustainability' Network is an international group of mainly design departments within higher education institutions.

[3] "Open innovation" was first coined by Chesbrough (2003) and has become a byword for an open approach to obtaining ideas, capabilities, skills and talent from outside the boundaries of the organisation.

References

Berger, W. 2010. Glimmer: How design can transform your World? Toronto: Vintage Canada.

Björgvinsson, E., Ehn, P. & Hillgren, P. 2012. Design things and design thinking: Contemporary participatory design challenges. Design Issues, 28(3):101-116.

Brooks, S. 2011. Design for social innovation: An interview with Ezio Manzini [online]. www.shareable.net [29 October 2011].

Brown, T. 2009. Change by design: How design thinking transforms organisations and inspires innovation. New York: HarperCollins Publishers.

Burn, C., Cottam, H., Leadbeater, C. & Winhall, J. 2006. Transformation design [online]. www.designcouncil.info [25 October 2011].

Chapman, J. 2005. Emotionally durable design: Objects, experiences and empathy. London: Earthscan.

Chesbrough, H. 2003. Open Innovation: The new imperative for creating and profiting from technology. Boston: Harvard Business School Press.

Chick, A., Micklethwaite, P. 2011. Design for sustainable change: How design and designers can drive the sustainability agenda. Switzerland: AVA Publishing.

Claridge, T. 2012. Social capital research [online]. www.socialcapitalresearch.com/definition.html [12 August 2012].

Coleman, R., Clarkson, J., Dong, H. & Cassim, J. 2007. Design for inclusivity: A practical guide to accessible innovative and user-centered design. Aldershot: Gower Publishing Limited.

Design Council. 2010. What's Dott? [online]. http://www.dottcornwall.com/about-dott/whats-dott [27 October 2011]

DESIS. 2011. www.desis-network.org [20 October 2011].

Emilson, A. 2011. Designing with the bees and trees – on design for social innovation [online]. http://medea.mah.se/2011/06/designing-with-the-bees-and-the-trees/. (15 June) [20 October 2011].

Emilson, A., Seravalli, A. & Hillgren, P. 2011. Dealing with dilemmas: Participatory approaches in design for social innovation. Swedish Design Research Journal. 1(11):23-29.

European Commission: Bureau of European Policy Advisers. 2010. Empowering people, driving change: Social innovation in the European Union [online]. http://ec.europa.eu/bepa/pdf/publications_pdf/social_innovation.pdf [12 August 2012].

Fairs, M. 2009. Green design. Dixon, T. Foreword. London: Carlton Books Limited.

Foreman, D. 1991. Confessions of an eco-warrior. New York: Three Rivers Press.

Fletcher, K. & Giggin, P. 2001. The dominant stances on ecodesign: A criticism. Design Issues, 17(3):15-25.

Fuad-Luke, A. 2009. Design activism: Beautiful strangeness for a sustainable

world. London: Earthscan.

Hewer, S., Guldbrandsen, M. & Crawley, A. 2011. A means to an end: Real solutions for real challenges. Proceedings from: Include 2011 International Conference: The Role of Inclusive Design in Making Social Innovation Happen (18-20 April 2011, Royal College of Art: London). http://include11.kinetixevents.co.uk/4dcgi/prog . [20 October 2011].

IDEO. 2008. Design for social impact workbook and toolkit for the Rockefeller Foundation [online]. www.ideo.com/work/design-for-social-impact-workbook-and-toolkit. [20 October 2011].

James, P. 2010. The debate: Is humanitarian design a new form of imperialism? [online]. www.good.is/post/the-debate-is-humanitarian-design-a-new-kind-of-imperialism/ . [20 October 2011].

Jégou, F. & E. Manzini. 2008. Collaborative Services: Social Innovation and Design for Sustainability. Milan: Poli Design.

Kimball, L. (23 June 2011). Five things people designing solutions to social problems should know [online]. www.designleadership.blog.co.uk. [12 July 2012].

Leadbeater, C. 2009. We think: Mass innovation, not mass production. London: Profile Books.

MacDonald, A. 2011. When worlds collide: Reconciling methodological differences in healthcare service innovation. Proceedings from: Include 2011 International Conference: The Role of Inclusive Design in Making Social Innovation Happen (18-20 April 2011, Royal College of Art: London). http://include11.kinetixevents.co.uk/4dcgi/prog . [25 October 2011].

Manzini, E. 2002. Sustainable solutions: New business ideas and new ideas on business. Milan: Politecnico di Milano. (July).

Manzini, E. 2006. Design, ethics and sustainability: Guidelines for a transition phase. Milan: Politecnico di Milano. (26 August).

Manzini, E. 2007. Designing networks and metadesign [online]. www.sustainable-everyday.net/main/?page_id=26 & http://attainable-utopias.org/tiki/ManziniMetadesignNotes [18 October 2011].

Manzini, E. 2009. Viewpoint: New Design Knowledge, Design Studies, 30(1):4-12.

Margolin, V. 1998. Design for a sustainable world. Design Issues, 14(2):83-92.

Margolin, V. & Margolin, S. 2002. A “social model” of design: Issues of practice and research. Design Issues, 18(4):24-30.

McCullagh, K. 2010. It’s time to rethink the T-shape designers? [online]. www.core77.com/blog/columns/is_it_time_to_rethink_the_t-shaped_designer_17426.asp [14 October 2011]

Morelli, N. 2007. Social innovation and new industrial contexts: Can designers “industrialize” socially responsible solutions? Design Issues, 23(4):3–21.

Morelli, N. 2011. Active, local, connected: Strategic and methodological insights in three cases. Design Issues, 27(2):90–110.

Mulgan, G. 2009. Strengths, weaknesses and a way forward? [online]. http://www.socialinnovationexchange.org/designforsi/blog?page=1 [14 October 2011]

Murray, R., Caulier-Grice, J., Mulgan, G. 2010. The open book of social innovation. London: The Young Foundation & NESTA.

Pilloton, E. 2009. Design revolution: 100 products that empower people. Los Angeles: Metropolis Books.

Rule, A. 2008. The revolution will not be designed [online]. www.inthesetimes.com/article/3464/the_revolution_will_not_be_designed/ (11 January) [14 October 2011]

Sangiorgi, D. 2010. Transformative services and transformation design. Proceedings from: ServDes 2010 Exchanging Knowledge Conference (1-3 December 2010; Linkoping, Sweden)

Schulman, S. 2010. Design thinking is not enough [online]. http://www.inwithfor.org/2010/01/designthinking- is-not-enough/ [14 October 2011]

Simon. H. 1996. Sciences of the Artificial [third edition]. Cambridge US: MIT Press

Social Innovation Exchange (SIX). 2011a. Welcome to the conversation! [online]. www.socialinnovationexchange.org/designforsi/ [25 October 2011].

Social Innovation Exchange (SIX). 2011b. What is design for social innovation? [online]. Available from: www.socialinnovationexchange.org/designforsi/whatisdesignforsocialinnovation [Accessed on 25 October 2011].

Szebeko, D. & Tan, L. 2010. Co-designing for society. Australasian Medical Journal. 9(9):580-590.

Thackera, J. 2007. Wouldn’t it be great if ….. (Dott 07 manual). London: Design Council.

Thorpe, A. 2007. The designer's atlas of sustainability. Washington, DC: Island Press.

Thorpe, A. 2010. Design's role in sustainable consumption. Design Issues, 26(2):3-16.

Tonkinwise, C. 2010. "Politics please, we're social designers" [online]. www.core77.com/blog/featured_items/politics_please_were_social_designers_by cameron_tonkinwise_17284.asp (1 September). [25 October 2011].

Tromp, N., Hekkert, P. & Verbeek, P.P. 2011. Design for socially responsible behaviour: A classification of influence based on intended user experience. Design Issues, 27(3):3-19.

United Nations Educational, Scientific and Cultural Organisations (UNESCO), 2001. Universal Declaration on Cultural Diversity [online]. http://unesdoc.unesco.org/images/0012/001271/127160m.pdf [15 October 2011].

United Nations Educational, Scientific and Cultural Organisations (UNESCO), 2011. Education for sustainable development: Themes [online]. http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/ [15 October 2011].

United Nations General Assembly, 2005. World Summit Outcome [online]. www.globalissues.org/article/559/united-nations-world-summit-2005 [15 October 2011].

Vallance, S., Harvey, C. P. & Dixon, J. E. 2011. What is social sustainability? A clarification of concepts. Geoforum, 42:342–348.

Van Hinte, E. & Bonekamp, L. 1997. Eternally Yours. Rotterdam: 010 Publishers.

Walker, S. 2006. Sustainable by design: Exploring theory and practice. London: Earthscan.

Westley, F., Goebey, S. & Robinson, K. 2012. Change Lab / Design Lab for social innovation. Waterloo: Waterloo Institute of Social Innovation and Resilience, University of Waterloo.

Winterhouse Institute. 2011. Design for social impact & Innovation [online]. www.winterhouse.com./institute/index.html [20 October 2011].

Wood, J. 2008. Changing the change: A fractal framework for metadesign [online]. http://attainable-utopias.org/tiki/AcademicPapers Proceeding from: Changing the Change: Design visions proposals and tools. (10- 12 July 2008, Torino). [20 October 2011].

About the Author

Professor Chick worked for six years for various international design agencies in London as a full time graphic and packaging designer. Then she worked part-time in these roles as well as pursuing a career in design research and writing, before pursuing an academic career. Professor Chick's main contribution has been in the field of mapping the design for sustainability field. Her research interests are in design for sustainability studies and applied transformative social design principles and tools. Professor Chick has presented and published widely in these areas, including books and papers in such journals as in Design Studies, Design Journal, and Design Management Review.

Professor Chick serves on the board of several international academic journals. She also has wide-ranging business and knowledge exchange experience in the corporate social responsibility and design field. Over her academic career Professor Chick has raised over £1.3m in research and enterprise funding.

Professor Chick is Visiting Professor in the Faculty of Environmental Design at the University of Calgary, Canada. She is a visiting academic to various universities in the UK and overseas in particular the Chinese Academy of Fine Arts in Beijing. Design Week identified Chick as one of the top ten influential individuals in sustainable design in Europe in 2009. She was also an expert advisor to the Design Museum for their Sustainable Futures travelling exhibition (2010) and is a Lead Technical Author, on the British Standard Institute PAS 8910: Sustainable Design standard.

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